

PART I
DEVELOPMENT

DEPARTMENT OF HUMAN RESOURCES
1.286
STATE OF HAWAII

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Class Specifications
for the Class:

NETWORK CONTROL TECHNICIAN

Class Distinguishers:

Complexity: Diagnoses and resolves network problems involving various types of communication transmission lines and systems, hardware, and software in the State's central data processing center by independently operating two or more master terminals to monitor and control communication transmission line activities of several departments which are connected to a central data processing center. Problems range from simple to complex and can generally be solved by discussing problems with users over the phone and guiding them through troubleshooting procedures, by utilizing problem resolution software and/or standard problem diagnostic procedures and equipment, and as necessary, conferring with vendors and professional staff to isolate and resolve problems.

Personal Contacts: Positions in this class serve as primary contacts in the State's central data processing center for computer users from State departments and other jurisdictions, vendors, and the general public in discussing, monitoring, diagnosing, and resolving network problems that are connected to a central data processing center. As discussions are generally by telephone, positions in this class must be skilled in conferring with and questioning callers so problems are clearly defined, and must also be able to explain to callers probable causes of problems, possible solutions, and other sources of assistance.

Full Performance Knowledges and Abilities: (*Knowledges and abilities required for full performance in this class.*)

Knowledge of: Operation of communication network master terminals and other related equipment such as data analyzers, modems, data lock security devices and printers; configuration and operation of the State's communication network systems, and relationships between hardware, software, and transmission lines in the system; networks and programs of individual State departments and how they interface with systems overseen by the Network Control Unit; relationships between the Network Control Unit and the other

pertinent sections and branches of the Information and Communication Services Division; methods to isolate, identify, and clear malfunctions; utilization of problem diagnosis hardware and software; job control language standards; remote entry procedures; and recovery procedures and techniques involving communication lines and systems.

Ability to: Understand the organization, structure, and services of the State's centralized data communication network management systems, and relationships to internal and external users, vendors, etc.; understand and operate various types of diagnostic and monitoring hardware/software; locate, identify/diagnose, prioritize, and resolve network problems; and establish and maintain effective working relationships with users and vendors.

Examples of Duties: *(Positions may not be assigned all of the duties listed, nor do the examples necessarily include all the duties that may be assigned. The omission of specific statements does not preclude management from assigning such duties if such duties are a logical assignment for the position. The classification of a position should not be based solely on the examples of duties performed.)*

1. As scheduled and continuously as needed, checks various central computer center master terminals and network management systems consoles to ensure optimal operating condition. Monitors the various network management systems for alert messages and failure indicators; and uses electronic test equipment and network management diagnostic applications to perform preventive maintenance routines.
2. Responds to alarms as indicated by terminals by running checks on hardware, utilizing problem solving software, handbook, and procedures, and diagnostic equipment such as data interrogators, line analyzers and multimeters; and conferring with users, supervisors, and professional computer staff as necessary.
3. Prioritizes problem solving according to severity of problem as indicated by terminals; and attempts problem solving according to standard procedures, but uses judgement to immediately request assistance from other staff as necessary.
4. Executes backup, bypass and recovery procedures, and

reactivates equipment through network management systems to make sure a system is running properly.

5. Responds to telephone trouble calls from on-line State agencies. Listens to problems being described, elicits more information if required, and attempts to pinpoint and solve problems if possible. Guides user in determining/clearing problem at their end, or seeks assistance from the supervisor or professional staff in the case of complex problems which, e.g., do not exhibit common symptoms, or which may exhibit multiple symptoms and require extensive testing. Seeks assistance from vendors as necessary.
6. Responds to telephone inquiries from the general public regarding accessibility to various computerized State information programs. Routine inquiries involve providing information on hours of program accessibility or indicating that a program is restricted, and not available to the general public. More complex inquiries may involve explaining incompatibility of equipment, and what the user has to do in order to access a program (e.g., obtain a modem, equipment with more memory, or a software program).
7. Brings difficult or unusual problems to the attention of the supervisor or professional staff. Explains how problem was discovered, difficulties it is causing, problem solving attempts, and may offer ideas toward resolution.
8. Works with vendors to identify possible equipment and line faults by explaining problems and corrective measures taken. Takes part in testing to track and resolve problems.
9. Documents network monitoring and troubleshooting problems into the on-line network trouble log which describes all problems encountered in the network (including lines, equipment, and procedures) and explains in detail all troubleshooting procedures, vendor and user contacts to ensure that adequate guidelines will be available if the problem recurs.
10. Provides training/assistance to the State's network users in the proper configuration of modems, control units and terminals, problem determination processes

and interpretation of light indicators, error messages
or codes appearing on modems, control units, and other
equipment located at the remote sites.

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This is the first specification for the new class, NETWORK CONTROL TECHNICIAN.

Effective Date: 11/17/87

DATE APPROVED: _____
Director of Human Resources Development